

MONOCLONAL ANTIBODY

Anti-GPR56 (Human) mAb

Code No.	Clone	Subclass	Quantity	Concentration
W125-3	3G7A5E	Mouse IgG2a κ	100 μ L	1 mg/mL

BACKGROUND: GPR56 is a member of G-Protein Coupled Receptor family. GPR56 contains 7 transmembrane domains as well as a mucin-like domain and cysteine box in the N-terminal region. Distribution of human GPR56 is a wide range of different tissues including heart, kidney, testis, pancreas, thyroid gland, and skeletal muscle. GPR56 is involved in cell adhesion and probably in cell-cell interaction. GPR56 also functions antagonistically to regulate VEGF production and possibly tumor angiogenesis. It is reported that overexpression of GPR56 suppresses tumor growth and metastasis, whereas reduced expression of GPR56 enhances tumor progression.

SOURCE: This antibody was purified from hybridoma culture supernatant by Protein A affinity column chromatography.

IMMUNOGEN: Human GPR56 expressed Ba/F3 transfectants generated from SST-REX (signal sequence trap by retrovirus-mediated expression screening).

FORMULATION: 100 μ g IgG in 100 μ L volume of PBS containing 50% glycerol, pH 7.2. No preservative is contained.

STORAGE: This antibody solution is stable for one year from the date of purchase when stored at -20°C .

REACTIVITY: This antibody reacts with human GPR56 on Flow cytometry.

APPLICATIONS:

- Flow cytometry; 1-10 μ g/mL
- Western blotting; Not tested
- Immunoprecipitation; Not tested
- Immunohistochemistry; Not tested
- Immunocytochemistry; Not tested

Detailed procedure is provided in the following **PROTOCOL**.

INTENDED USE:

For Research Use Only. Not for use in diagnostic procedures.

Entrez Gene ID:

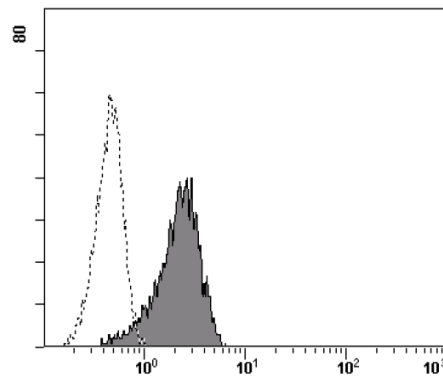
9289 (Human)

SPECIES CROSS REACTIVITY:

Species	Human	Mouse	Rat	Hamster
Cells	Transfectant	Not tested	Not tested	Not tested
Reactivity on FCM	+			

REFERENCES:

- 1) Paavola, K. J., *et al.*, *J. Biol. Chem.* **286**, 28914-28921 (2011)
- 2) Yang, L., *et al.*, *Cancer Res.* **71**, 5558-5568 (2011)
- 3) Kim, J. E., *et al.*, *J. Cancer Res. Clin. Oncol.* **136**, 47-53 (2010)
- 4) Xu, L., *et al.*, *PNAS* **103**, 9023-9028 (2006)
- 5) Kojima, T and Kitamura, T. *Nat. Biotechnol.* **17**, 487-490 (1999)



Flow cytometric analysis of human GPR56 expression on Ba/F3 transfectant. Open histograms indicate the reaction of isotypic control to the cells. Shaded histograms indicate the reaction of W125-3 to the cells.

PROTOCOL:

Flow cytometric analysis for floating cells

We usually use Fisher tubes or equivalents as reaction tubes for all steps described below.

- 1) Wash the cells 3 times with washing buffer [PBS containing 2% fetal calf serum (FCS) and 0.05% NaN_3].
- 2) Resuspend the cells with washing buffer (2.5×10^6 cells/mL).
- 3) Add 200 μ L of cell suspension into each tube. And centrifuge at 500 x g for 1 minute at room temperature ($20\sim 25^{\circ}\text{C}$). Remove supernatant by careful decantation.
- 4) Add 20 μ L of Clear Back (human Fc receptor blocking reagent, MBL; code no. MTG-001) to the cell pellet after

- tapping. Mix well and incubate for 5 minutes at room temperature.
- 5) Add 50 μ L of the primary antibody at the concentration as suggest in the **APPLICATIONS** diluted in the washing buffer. Mix well and incubate for 30 minutes at room temperature.
 - 6) Add 1 mL of the washing buffer followed by centrifugation at 500 x g for 1 minute at room temperature. Remove supernatant by careful decantation.
 - 7) Add 50 μ L of 1:200 anti-mouse IgG-PE (Beckman Coulter; code no. IM0855) diluted with the washing buffer. Mix well and incubate for 30 minutes at room temperature.
 - 8) Add 1 mL of the washing buffer followed by centrifugation at 500 x g for 1 minute at room temperature. Remove supernatant by careful decantation.
 - 9) Resuspend the cells with 500 μ L of the washing buffer and analyze by a flow cytometer.

(Positive control for Flow cytometry; transfectant)

RELATED PRODUCTS:

W005-3	Anti-BTN2A1 (Human) mAb
W008-3	Anti-Carboxypeptidase D (Human) mAb
W011-3	Anti-Dystroglycan (Human) mAb
W017-3	Anti-EphA2 (Human) mAb
W029-3	Anti-IGFBP1 (Human) mAb
W050-3	Anti-RECK (Human) mAb
W086-3	Anti-LYPD3 (C4.4A) (Human) mAb
W089-3	Anti-C11orf24 (Human) mAb
W124-3	Anti-GPR56 (Human) mAb
W125-3	Anti-GPR56 (Human) mAb
W194-3	Anti-FAM171A1 (Human) mAb
W253-3	Anti-Glypican 1 (Human) mAb
W357-3	Anti-CD105 (Endoglin) (Human) mAb
W358-3	Anti-CD300A (Human) mAb
W359-3	Anti-CD300C (Human) mAb
M076-3	Mouse IgG2a (isotype control)
MTG-001	Clear Back (Human Fc receptor blocking reagent)